

### Listing of the Claims

1. (Currently Amended) A data processing device ~~(10)~~ for registration of a first image ~~(A)~~ of an object, which first image was obtained with a first imaging method ~~(1)~~, having a second image ~~(B)~~ of the object, which second image was obtained with a second imaging method ~~(2)~~ different from the first imaging method, wherein the data processing device is equipped for executing the following steps:

- a) Generating a first transformed image ~~(A')~~ from the first image ~~(A)~~, in which characteristic image features of the first imaging method ~~(1)~~ are reduced and/or characteristic image features of the second imaging method ~~(2)~~ are intensified;
- b) Generating a second transformed image ~~(B')~~ from the second image ~~(B)~~, in which, optionally characteristic image features of the second imaging method ~~(2)~~ are reduced and optionally, characteristic image features of the first imaging method ~~(1)~~ are intensified;
- c) Registration of the transformed images ~~(A', B')~~.

2. (Currently Amended) A data processing device as claimed in claim 1, ~~characterized in that~~ wherein the imaging methods comprise the application of different modalities, wherein one of the modalities is a computer tomography ~~(1)~~, an X-ray projection, a magnetic resonance imaging method, an ultrasound method ~~(2)~~, an X-ray fluoroscopy or a CT- fluoroscopy and wherein the image ~~(A)~~ obtained thereby is two dimensional or three dimensional.

3. (Currently Amended) A data processing device as claimed in claim 1, ~~characterized in that~~ wherein the imaging methods were generated with the same modality with different imaging conditions.

4. (Currently Amended) A data processing device as claimed in claim 1, which is arranged for executing a feature-based registration of the transformed images ~~(A', B')~~.

5. (Currently Amended) A data processing device as claimed in claim 1, which is arranged for segmenting object areas with different material composition in at least one of the images ~~(A)~~.

6. (Currently Amended) A data processing device as claimed in claim 1, which is arranged for masking areas of the transformed images ~~(A')~~, in which at least one of the imaging methods ~~(2)~~ does not supply reliable information.

7. (Currently Amended) A data processing device as claimed in claim 1, which is arranged for considering the positions measured with the help of a position-measuring apparatus and/or a calibration of the images ~~(A, B)~~ during the registration.

8. (Original) A data processing device as claimed in claim 1, which is arranged for using the flexible registration method.

9. (Currently Amended) A process for registration of a first image ~~(A)~~ of an object, which first image was obtained with a first imaging method ~~(1)~~, with a second image ~~(B)~~ of the object, which second image was obtained with the second imaging method ~~(2)~~, different from the first imaging method, comprising the following steps:

- a) Generating of a first transformed image ~~(A')~~ from the first image ~~(A)~~, in which characteristic image features of the first imaging method ~~(1)~~ are reduced and/or characteristic image features of the second imaging method ~~(2)~~ are intensified;
- b) Generating of a second transformed image ~~(B')~~ from the second image ~~(B)~~, in which optionally characteristic image features of the second imaging method ~~(2)~~ are reduced and optionally characteristic image features of the first imaging method ~~(1)~~ are intensified;
- c) Registration of the transformed images ~~(A', B')~~.

10. (Currently Amended) A process as claimed in claim 9, ~~characterized in that~~ wherein, the steps a), b) and c) are repeated many times with variation of at least one of the transformed images ~~(A')~~, in order to maximize a degree of similarity between the transformed images ~~(A', B')~~.